

Application No. 10/644,135
Amendment dated 02/06/2008
Office Action Mailed September 6, 2007

02-ASD-334 (EM)

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A electric fluid servo valve assembly comprising:
 - (a) a solenoid valve body having a fluid inlet passage, a fluid outlet passage, a pressure sensing port communicating with said outlet passage, and an obturator disposed therein that is moveable for controlling flow between said inlet passage and outlet passage upon connection of said inlet passage to a source of fluid;
 - (b) an electric actuator disposed with said valve body and operable upon electrical energization for affecting movement of said obturator; and
 - (c) a circuit board with a pressure sensor, the pressure sensor having a sensing aperture disposed thereon, said circuit board having a sensing aperture and being disposed over said pressure sensing port in said valve body such that said sensing aperture in said pressure sensor circuit board is aligned with said pressure sensing port.
2. (Previously amended) The valve assembly defined in claim 1, wherein said valve body has a planar surface with said pressure sensing port located thereon.
3. (Previously amended) The valve assembly defined in claim 1, wherein said pressure sensor is a transducer and said circuit board includes circuitry for processing a signal output of said transducer.
4. (Original) The valve assembly defined in claim 1, wherein said pressure sensor includes a piezoelectric transducer.

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5. (Original) The valve assembly defined in claim 1, wherein said electric actuator includes a solenoid.
6. (Previously amended) The valve assembly defined in claim 1, wherein said sensing aperture in said pressure sensor is sealed over said pressure sensing port in said valve body with an annular seal ring.
7. (Previously Amended) The valve assembly defined in claim 1, wherein said sensing aperture in said pressure sensor includes an aperture formed through said circuit board.
8. (Original) The valve assembly defined in claim 1, wherein said electric actuator includes a plurality of discrete electrical terminals.
9. (Original) The valve assembly defined in claim 1, further comprising a manifold with a plurality of said valve bodies secured thereon with said inlet and outlet passages of each valve body communicating with corresponding inlet and outlet ports on said manifold.
10. (Previously Amended) A method of making a fluid electric servo valve assembly comprising:
 - (a) providing a valve body having an inlet and outlet and a pressure sensing port communicating with the outlet;
 - (b) disposing a movable obturator in said valve body between said inlet and outlet for controlling flow therebetween;
 - (c) disposing an electric actuator on said body and effecting movement of the obturator upon energization of the actuator;
 - (d) disposing a circuit board with a pressure sensor thereon, the circuit board having a pressure sensing aperture that is aligned with the pressure sensor and said pressure sensing port and providing an electrical indication of the sensed pressure at the valve outlet.

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11. (Original) The method defined in claim 10, further comprising disposing the valve body on a manifold block and connecting said inlet and outlet passages to corresponding inlet and outlet ports in said manifold.
12. (Previously amended) The method of defined in claim 10, wherein said step of disposing a circuit board includes disposing the circuit board with a pressure sensor.
13. (Previously Amended) The method defined in claim 10, wherein said step of disposing an electric actuator includes disposing a solenoid to move obturator magnetically.
14. (Previously amended) The method defined in claim 10, wherein said step of disposing a circuit board over said pressure sensing port in said valve body includes sealing said board over said port with an annular seal.
15. (Previously amended) A electric fluid servo valve assembly comprising:
 - (a) a valve body having a fluid inlet passage, a fluid outlet passage, a pressure sensing port communicating with said outlet passage and an obturator disposed therein and moveable for controlling flow between said inlet passage and outlet passage upon connection of said inlet passage to a source of fluid;
 - (b) an electric actuator disposed with said valve body and operable upon electrical energization for affecting movement of said obturator; and
 - (c) a pressure sensor having an inlet port arranged to align with a sensing aperture on a circuit board, the sensing aperture being aligned with said pressure sensing port in said valve body such that said sensing aperture in said circuit board communicates with the inlet port through said pressure sensing port.

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16. (Previously added) The valve assembly defined in claim 15, wherein said valve body has a planar surface with said pressure sensing port located thereon.
17. (Previously added) The valve assembly defined in claim 15, wherein said pressure sensor is a transducer.
18. (Previously added) The valve assembly defined in claim 15, wherein said electric actuator includes a solenoid.
19. (Cancelled)
20. (Previously added) The valve assembly defined in claim 15, further comprising a manifold with a plurality of said valve bodies secured thereon with said inlet and outlet passages of each valve body communicating with corresponding inlet and outlet ports on said manifold.